

Reconsideration and allowance of all claims are respectfully requested in view of the following remarks.

Claim Rejections - 35 U.S.C. § 102

The Examiner rejects claims 26, 27 and 32-40 under § 102(b) as being anticipated by US Patent 3,761,314 to Cailley (hereinafter Cailley). Applicants respectfully traverse this rejection because Cailley fails to establish anticipation.

Claim 26 sets forth a method of making an electrochemical cell which includes the steps of, *inter alia*, providing an electrode stack which includes a first electrode extending from one end of the stack, and folding at least one section of the first electrode to form a tab connection portion, such that the tab connection portion does not extend over the entire one end of said stack. Because the tab connection portion does not extend over the entire one end (6) of the electrode stack, a sufficient contact area is formed while leaving the rest of the electrode end unmodified for readily accepting electrolyte.¹

In contrast to that set forth in claim 26, Cailley discloses an electrode stack (11) wherein the edge parts of the electrodes are provided with transverse slots (19) to provide segments. The segments are then folded down so as to form a supporting surface (6') which is substantially in a plane.² The segments are folded to produce a winding assembly whose opposite ends resemble fish scales, as shown in Figure 3, which cover the "whole surface of the respective ends" of the

¹ Specification at p. 9, line 32 - p. 10, line 3.

² Cailley at c. 2, lines 27-38.

winding (11).³ Although Cailley states that the fish scales do not cover the central hole, there is no winding in the central hole either. As shown in Figure 2, the slots (9) extend along the entire length of the edge part (7') of the electrode's carrier sheet (7). And as shown in Figure 4, the winding (11) does not extend across the entire diameter of the cell casing (10). Further as shown in Figure 4, the folded segments do extend across the entire extent of the winding (11). Therefore, Cailley does not disclose a step of folding at least one section of the first electrode so as to form a tab connection portion that does not extend over the entire one end of the electrode stack, as set forth in claim 26.

The Examiner asserts that in figure 1 of Cailley the entire left side from top to bottom of the electrode stack is not covered by the tab portion. However, the left *side* is not the same as the claimed *entire one end of said stack*. The claim requires that a longitudinal axis runs between the ends of the stack. For example, the ends would be the top and bottom and not the side. As mentioned above, the tab connection extends over the entire *end* of the stack in Cailley.

For the above reasons, claim 26 is not anticipated by Cailley. Claims 27, 32, 35, 36 and 37 depend from claim 26 and, therefore, should be allowable at least by virtue of their dependency.

Claim 33 sets forth a method of making an electrochemical cell including the steps of, *inter alia*, providing an electrode stack which includes a first electrode extending from one end of the stack, a second electrode extending from an opposite end of the stack, and a longitudinal

³ *Id.* at c. 3, lines 66-75.

RESPONSE UNDER 37 C.F.R. §1.116
USSN: 09/251,149

axis between said ends of the stack; folding at least one section of the first electrode so that it extends in a direction at an angle to the longitudinal axis to form a tab connection portion; and making a pair of slits in the one end of the electrode stack, wherein said step of folding at least one section of the first electrode includes folding at least one section of the first electrode between said pair of slits.

However, Cailley fails to disclose at least the limitation of making a pair of slits in the one end of the electrode stack, wherein said step of folding at least one section of the first electrode includes folding at least one section of the first electrode between said pair of slits. Therefore, claim 33 is not anticipated by Cailley.

Claim 34 depends from claim 33 and, therefore, should be allowable at least by virtue of its dependency for the reasons describe above.

Claim 38 sets forth a method of making an electrochemical cell including the steps of, *inter alia*, providing an electrode stack which includes a first electrode having a first end, a second electrode, and a periphery, folding at least one section of the first electrode to form a tab connection portion that does not extend around the entire periphery of the stack. Again, because the tab connection portion does not extend around the entire periphery of the stack, a sufficient stack area remains unmodified so that it can readily accept electrolyte.

RESPONSE UNDER 37 C.F.R. §1.116
USSN: 09/251,149

In contrast to that set forth in claim 38, Cailley discloses an electrode stack (11) having an end whose entire periphery is covered by the supporting area (6') formed by the folded segments of the electrode. See Figures 3 and 4. Therefore, Cailley does not disclose a step of folding at least one section of a first electrode to form a tab connection portion that does not extend around an entire periphery of the stack, as set forth in claim 38.

The Examiner asserts that in figure 1 of Cailley the entire left side from top to bottom of the electrode stack is not covered by the tab portion. However, the left *side* is not the same as the claimed *entire periphery of said stack*.

For the above reasons, claim 38 is not anticipated by Cailley. Claims 39 and 40 depend from claim 38 and, therefore, should be allowable at least by virtue of their dependency for the reasons describe above.

The Examiner rejects claims 26, 32, 35, 36, and 38 under § 102(a) and (e) as being anticipated by US Patent 5,736,270 to Suzuki et al. (hereinafter Suzuki). Applicants respectfully traverse this rejection because Suzuki fails to establish anticipation.

Again, claim 26 sets forth at least the steps of providing an electrode stack which includes a first electrode extending from one end of the stack, and folding at least one section of the first electrode to form a tab connection portion, such that the tab connection portion does not extend over the entire one end of said stack.

In contrast, Suzuki discloses parts (26A, 28A) which are folded so as to form a current collection portion which extends over the entire end of the electrode stack. That is, the parts (26A, 28A) extend along the entire length of the anode (26) and cathode (28), respectively. After the stack is wound, or as the stack is being wound, the parts (26A, 28A) are folded toward the center of the stack to thereby extend over the entire end of the stack. See Figures 4 and 5. Therefore, Suzuki does not disclose at least a step of folding a section of a first electrode to form a tab connection portion that does not extend over the entire end of the stack, as set forth in claim 26.

The Examiner asserts that in figures 4 and 5 of Suzuki the entire left and right side of the stack is not covered by the tab portion. However, the left and right *sides* are not the same as the claimed *entire one end of said stack*. The claim requires that a longitudinal axis runs between the ends of the stack. For example, the ends would be the top and bottom and not the side. As mentioned above, the tab connection extends over the entire *end* of the stack in Suzuki.

For the above reasons, claim 26 is allowable over Suzuki. Claims 32, 35, and 36 depend from claim 26 and, therefore, are allowable at least by virtue of their dependency.

Claim 38 sets forth, as noted above, a method of making an electrochemical cell including at least a steps of, folding at least one section of a first electrode to form a tab connection portion that does not extend around the entire periphery of the stack. In contrast, Suzuki discloses parts (26A, and 28A) which form a current collection portion around the entire periphery of the electrode stack. See Figures 4 and 5. Therefore, Suzuki does not disclose a method of making an electrochemical cell including at least the step of folding at least one

RESPONSE UNDER 37 C.F.R. §1.116
USSN: 09/251,149

section of a first electrode to form a tab connection portion that does not extend around the entire periphery of the stack, as set forth in claim 38.

The Examiner asserts that in figures 4 and 5 of Suzuki the entire left and right sides of the electrode stack is not covered by the tab portion. However, the left and right *sides* are not the same as the claimed *entire periphery of said stack*.

For the above reasons, claim 38 is allowable over Suzuki.

Claims 39 and 40 depend from claim 38 and, therefore, should be allowable at least for the same reasons as set forth with respect to claim 38.

Conclusion

In view of the foregoing, the claims are now believed to be in form for allowance, and such action is hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

RESPONSE UNDER 37 C.F.R. §1.116
USSN: 09/251,149

Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Carl J. Pellegrini", written over a horizontal line.

Carl J. Pellegrini
Registration No. 40,766

SUGHRUE, MION, ZINN,
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: September 14, 2000